REMARKS

Status of Claims

Claims 1 – 34 were original in the application. Claims 1, 2, 6 – 9, 11, 12, 15 - 20, 24, 26, and 27 have been currently amended. Claim 10 has been cancelled. Claims 1 – 9 and 11 – 34 are submitted as being in a clearly allowable condition or at least in a better form for appeal.

Objections to the Drawings

The Examiner objected to the drawings for failure to show the message queue module, the unbilled alert module and the billing dialogue module. These software routines are in each case already depicted in the drawings and the Applicant has amended the specification to make the fact of this depiction clearer. The Examiner required illustration in the drawings of the message queue. The message queue is currently shown in the drawings in the form of job record 26. Paragraph [0058] of the specification states:

[0058] Printer monitor, installed at server 12, detects the print job step 20 at step 22. At step 24, printer monitor extracts relevant information from the print job step 20 issued by the user. In step 28, **this information** is stored in the message queue resident on database 16 in the form of print job record 26. The information now stored in record 26 will be available to other system components as required. It should be noted that the message queue is preferably capable of storing a large number of records 26 corresponding to print jobs executed by a number of different users at different client computers 10.

The Examiner request depiction of the unbilled alert module which is a software routine on the client computer 10. The software routine is already

symbolically depicted by step 36 in Fig. 3. Paragraph [0054] has been amended to make this clearer.

[0054] 4. Unbilled print alert: The unbilled print alert is a software routine through which a user is alerted to the existence of unbilled print activity generated by that user, which unbilled print alert module is symbolically depicted in Fig. 3 as step 36. Preferably, the unbilled print alert places a graphical icon in an unobtrusive location on the computer screen of the client computer through which the user is logged in. The unbilled print alert is preferably resident on client computer 10, preferably stored on magnetic disk or other permanent media and capable of being loaded into the volatile memory of client computer 10 for execution.

The Examiner request depiction of the billing dialogue module which is a software routine on the client computer 10. The software routine is already symbolically depicted by step 36 in Fig. 3. Paragraph [0055] has been amended to make this clearer.

[0055] 5. Billing dialogue: The billing dialogue is a software routine that provides a graphical user interface through which the user may supply information to the record of a print job for the purpose of print job qualification, which billing dialogue module is symbolically depicted in Fig. 3 as step 32. The billing dialogue is preferably resident on client computer 10, preferably stored on magnetic disk or other permanent media and capable of being loaded into the volatile memory of client computer 10 for execution.

Objections to the Claims

Claims 1 and 27 have been responsively amended to meet the objections at paragraphs 3 and 4 of the Office Action.

Claim Rejections - 35 USC § 112

In response to paragraph 5 of the Office Action claim 1 has been responsively amended. Paragraphs [0036], [0037] and [0054] of the specification

state:

[0036] The present invention comprises a two-phase, asynchronous print tracking system. In this two-phase scheme, a print job is sent from a client computer to a server computer, where its existence is detected, and where data about the print job is extracted. The extracted data is sent to a central message queue, where the client computer reads the data and graphically notifies the user of the existence of unbilled print activity. Billed print job information is preferably written to a central location, where a management interface allows for viewing and reporting of print data.

[0037] In contrast to the "hostage" and "guarantine" enforcement methods described above, the present invention comprises what may be termed a "nag" enforcement method. This enforcement method allows the print job to pass unhindered from the client computer to the server, and then to the printer. A quota, defined by a system administrator, determines how many unbilled print jobs can exist for a given user before a mandatory billing interface is displayed. While a given user's unbilled print count is below the quota, the user may recall the billing interface at his or her discretion. The user may thus delay the entry of the required billing information to a convenient time, but cannot avoid entering the information and cannot indefinitely delay the entry of the information to a point where the user may no longer recall the pertinent information. Enforcement is preferably accomplished once the quota is reached by obscuring the computer screen with the billing interface. Though other processes on the client computer are not interrupted, the user is essentially unable to use the computer without sufficiently addressing, then dismissing, the billing interface.

[0054] 4. Unbilled print alert: The unbilled print alert is a software routine through which a user is alerted to the existence of unbilled print activity generated by that user. Preferably, the unbilled print alert places a graphical icon in an unobtrusive location on the computer screen of the client computer through which the user is logged in. The unbilled print alert is preferably resident on client computer 10, preferably stored on magnetic disk or other permanent media and capable of being loaded into the volatile memory of client computer 10 for execution.

In context it is clear that central message queue is in the server. When cost recoupment data is <u>required</u> by the server from the corresponding client computer at a later second time temporally independent from the first time, an unbilled alert is activated in the client computer. The administrator sets up a

quota for unbilled jobs in the server, which then "nags" the client computer by triggering the unbilled alerts.

In response to paragraph 6 of the Office Action claim 1 is directed to an asynchronous tracking system on a computer network including a plurality of client computers and a server. The computer network recoups costs for performance of a job at time defined as the "first time". The tracking of the job at the second time is by definition an asynchronous event relative to the first time when the job is performed. The specification is replete with references to the asynchronous operation of the invention. For example, paragraph [0038] states:

[0038] Many of the advantages of the present invention flow from the separation of detection (phase 1) and billing (phase 2) of print activity, and the use of a quota-based message queue between the separate phases. The present invention allows native print processes to flow undisturbed by the requirement to enter billing information. Decoupling detection and billing eliminates the onerous enforcement techniques found in the prior art. It should be noted that in the **asynchronous** model of the present invention, the act of writing data about a print job to a database preferably takes place when the billing data is supplied; this contrasts with some systems in which the writing of data may or may not occur at or near the time when the print information is extracted and stored. In the **asynchronous** model, the moment that the factual information concerning a print job is extracted it is recorded in a message queue. The user is then prompted to supply additional billing information.

These separate phases of operation in an **asynchronous** manner means that the two separated operations occur **temporally independently** from each other. There is no temporal rule locking the events in a fixed relationship. Merriam-Webster Online Dictionary states:

asyn·chro·nous

Function: adjective

1: not synchronous

2: of, used in, or being digital communication (as between computers) in

which there is no timing requirement for transmission and in which the start of each character is individually signaled by the transmitting device

In response to paragraph 7 of the Office Action paragraph [0054] of the specification states:

[0054] 4. Unbilled print alert: The unbilled print alert is a software routine through which a user is alerted to the existence of unbilled print activity generated by that user. Preferably, the unbilled print alert places a graphical icon in an unobtrusive location on the computer screen of the client computer through which the user is logged in. The unbilled print alert is preferably resident on client computer 10, preferably stored on magnetic disk or other permanent media and capable of being loaded into the volatile memory of client computer 10 for execution. It is clear that the unbilled alert module is on the client computer. Claims 10 and 11 have been responsively clarified.

In response to paragraph 8 of the Office Action claim 1 states in part:

workstation monitor module comprises means for transmitting a message to said unbilled alert module if said message queue module contains a record pertaining to a job submitted from the corresponding client computer.

Although communication of the message from the workstation monitor module may be asynchronous with respect to the time when the job is performed, claim 1 does not explicitly state that "the workstation monitor module communicates a message which is temporally independent for the first time a job has been performed." The Examiner's rejection is not understood.

In response to paragraph 9 of the Office Action the applicants respectfully disagree with the Examiner's interpretation of conditional or synchronous activity. The fact that an event may be dependent on a preceding condition does not in any manner mean that the event is synchronous with the condition as the

Examiner assumes. For example, an event can occur, if at all, at a random time after the condition. There is no synchronicity involved, only possible causality.

Merriam-Webster Online Dictionary defines synchronous as:

syn·chro·nous

Function: adjective

- 1: happening, existing, or arising at precisely the same time
- 2: recurring or operating at exactly the same periods
- 3: involving or indicating synchronism
- **4 a**: having the same period; *also*: having the same period and phase **b**: **GEOSTATIONARY**
- **5**: of, used in, or being digital communication (as between computers) in which a common timing signal is established that dictates when individual bits can be transmitted, in which characters are not individually delimited, and which allows for very high rates of data transfer

The job performance and the cost data recovery do not happen, exist, or arise at precisely the same time or recur or operate at exactly the same periods. Hence, they are not synchronous, or they are asynchronous. The fact that job performance must occur before there is any cost data recovery does not make the two operations synchronous, since their timing aside from causality is unrelated and independent from each other.

In response to paragraph 10 of the Office Action claims 18 and 19 have been responsively amended.

In response to paragraph 11 of the Office Action claim 1 has been responsively amended.

In response to paragraph 12 of the Office Action claim 18 has been responsively amended.

In response to paragraph 13 of the Office Action claim 27 has been responsively amended.

Claim Rejections - 35 USC § 102(e)

Claims 1 - 34 continue to be rejected as anticipated by Keane US Patent 6,650,433 81.

With respect to claim 1, the Examiner continues to cite Keane as disclosing an asynchronous tracking system on a computer network comprising a message queue, an unbilled alert module and a workstation monitor module.

Claim 1 has been amended to state:

an unbilled alert module resident on at least one of the plurality of client computers for generating a message of unbilled cost data on the corresponding client computer

The Examiner expressly acknowledged at paragraph 1 of the Office Action that the inclusion of an unbilled alert module resident on at least one of the plurality of client computers for generating a message of unbilled cost data would constitute a "clear distinction" over Keane. Hence it cannot be maintained that Keane discloses each and every element of claim 1 as amended.

The applicants continue to respectfully disagree with the Examiner for the additional reasons previously set forth namely:

- Keane is an internet system for managing offset printing jobs and billing customers who order a printing job;
- 2. Keane is not an internal cost tracking system;
- Keane's Purchase Wizard is what is called a hostage or quarantined method (The disclosure at col. 14, lines 40-49, describes recoupment of costs, but does not do so as a free printing, but conditioned at the cost of attached advertising,

expedited delivery, or collateral sales.);

4. Keane is not a recoupment system, but is a fulfillment system.

With respect to claim 2, the Examiner continues to cite Keane as disclosing a Purchase Wizard configured to run on the user's browser, col. 14, lines 15-35, that receives information about printing transactions.

Claim 2 depends on claim 1 and is allowable therewith. Although the Examiner contends that the Purchase Wizard may appear at any time, a reading of Keane in context as a whole makes it clear that the Purchase Wizard, as an unbilled print alert, does not appear on the screen of Keane's system after the job is performed, but before it. The alleged lack of an express restriction of when the Purchase Wizard appears cannot be held to disclose every possible other timing of the Purchase Wizard. To make such an argument would be to interpret every lack of disclosure as disclosing anything and everything that was not disclosed, which is a non sequitur.

In compliance with the requirements of 37 CFR 1.111(b) claims 3 – 5 depend directly or indirectly on claim 1 and are allowable therewith as a matter of law and further in regard to the arguments set forth with claim 1, which are reincorporated here by reference, together with such additional limitations as included in the claims. This statement specifically points out how the claims are distinguished over the references.

Pursuant to MPEP 1205.02(vii) on appeal where as here the claims have been rejected as a group on a single ground, namely claims 1 – 34 being

rejected on Keane, the dependent claims may be grouped together or with an independent claim, and the applicant may elect to argue patentability for such groups as may be elected. The manner of argument and grounds for allowance in prosecution are not more restricted than those on appeal.

As a matter of law it is beyond dispute that a dependent claim is clearly allowable with the claim on which it depends with which it stands or falls even if no additional ground for appeal is alleged. To contend that an applicant cannot argue for patentability of dependent claims as a group with the claim on which they depend is to assert or to attempt to impose a limitation on patentability clearly outside the scope of the law and the power of the Office.

With respect to claim 6, the Examiner contends that Keane's Order Table in col. 1, which limits defective orders to being submitted a few times before a warning is raised, is the same as a means for setting a maximum unbilled job value.

Keane refers to a single order which for some reason is defective or has a problem, so that it must been resubmitted. This same order can only be resubmitted a limited number of times before a warning is raised. Keane does not disclose what happens after the warning is raised. Keane is not concerned with submission of different job orders or actually performed jobs which are each unbilled. What Keane is addressing with the ST_REPEAT code is not the same operation, event or situation with which the maximum unbilled job value of claim 6 is directed. Hence, Keane does not disclose the subject matter of claim 6.

With respect to claim 7, the Examiner contends that Keane has a billing

screen that prompts the user for required billing information and only allows the order to be resubmitted a limited number of times before a warning is raised. From this the Examiner contends that Keane has disclosed a means for forcing qualification data to be entered from the corresponding client computer before proceeding, when the number of records pertaining to a job submitted by the corresponding client computer exceeds a maximum unbilled job value.

First, as stated above Keane discloses nothing about maximum unbilled job values. Second, Keane has no disclosure that forces billing information to be entered when a maximum number of jobs to be performed, but have not been billed, as been exceeded. A warning does not force any action or force entry of the qualification data as required by claim 7. There is no similar enforcement in Keane and hence it cannot be maintained that Keane discloses each and every element of claim 7.

The Examiner repeats the previous rejection of claim 8 and contends that Keane inherently obscures the screen by the Billing Information screen that prompts the customer for required billing information.

The specification states at paragraph [0061]:

[0061] The billing dialogue may also be initiated at step 36 by the user having exceeded a predetermined limit on the number of print jobs that may be entered without the entry of qualification data associated with those print jobs. In order to ensure compliance, the billing dialogue GUI that appears when the quota is reached preferably cannot be moved and obscures other data on the screen, such that client computer 10 is essentially unusable by the user until the billing dialogue is completed. . . .

There is no disclosure in Keane that the billing information screen

obscures any other screen, let alone being provided as an irremovable or obscuring screen on top of some other display. The *entirety of the disclosure* of Keane to the billing information screen of Fig. 4V is a mere listing of screens in the Purchase Wizard without more:

A Purchase Wizard used in one implementation of the invention is shown in FIGS. 4P-4W. Like the Design Wizard, the Purchase Wizard appears to the customer as a standard Windows Wizard application. The Wizard may be configured to run on the user's browser, or on the web server, depending on the preference and resources of the web server host. The final purchase information is transmitted over a secure server connection. The Wizard includes a Welcome screen (FIG. 4P), a Review screen (FIG. 4Q) that gives the customer a final opportunity to review the design, an Address screen (FIG. 4R) that allows the customer to input a shipping address and select an order quantity, one or more Options screens that offer the customer choices of upgrades, e.g., to remove the advertising text on the reverse side (FIG. 4S), a Delivery screen (FIG. 4T) that allows the customer to select delivery options, e.g., expedited delivery, a screen that notifies the customer that the order is being submitted to the server (FIG. 4U), a Billing Information screen that allows the customer to input billing information (FIG. 4V), and a Payment Confirmation screen that asks the customer for final confirmation of the order.

Keane provides the screens as a standard windows application where the screens can be opened, moved, closed and treated as it they were separate pieces of paper so that no window or screen needs to obscure another.

Windows is an operating program which by definition allows screens to be sized and move around so that no screen is obscured, i.e. it is as if it were a window.

Still, there is also no disclosure a maximum number of unbilled jobs as been exceeded as assumed by claim 8. Every attributed feature, other than the simple existence of the billing information screen, is a naked importation of features into Keane from the present application. The combination of screen

display, quota control and billing satisfaction of claim 8 is not disclosed in Keane.

With respect to claim 9, the Examiner repeats the prior rejection based on Keane as disclosing a computer network comprising a communications medium, at least one client computer connected to said communications medium, at least one printer connected to said communications medium, a message queue connected to said communications medium, wherein said message queue is capable of storing at least one record, and wherein each of said records comprise data pertaining to a print job submitted by a user at one of said client computers and a workstation monitor resident on said client computer, wherein said workstation monitor transmits a message to said client computer if the message queue contains a record pertaining to a print job submitted by the user.

Claim 10 has been cancelled and merged into claim 9. The arguments distinguishing claim 1 over Keane are reincorporated with respect to claim 9. The Examiner's clearly distinguishing limitation of an unbilled alert module for automatically generating a message of unbilled cost data as per paragraph 1 of the Office Action is included in claim 9.

The applicant respectfully disagrees with the characterization of Keane. Keane's Purchase Wizard is a hostage or quarantined method. The customer does not get to initiate and cause print jobs to be performed until he first enters billing information to his credit card or account. The alleged free printing is conditioned on a concession and Keane does not disclose that billing information is dispensed with in such cases. The contrary is the implication since other merchandise is to be sold in cases where the business cards are given away.

Hence, billing information is still taken or required even in the free cases, where no monetary charge is made or upgrade sole, but nonmonetary consideration is given in terms distribution of advertising. Customer identification, e.g. name and address on the business card, is billing or customer information even when associated with a \$0 or no charge payment. The fact that a charge of \$0 is made requires the software system to input and process billing information just as if the number were something other than zero.

Keane is not a recoupment system, but is a fulfillment system and for that reason alone fails to disclose the claimed invention as amended in claim 9. The time of printing is temporally conditioned on and occurs after the time of billing satisfaction or the taking of billing information, contrary to the requirements of claim 9.

With respect to claim 11, the Examiner cites Keane's purchase wizard as receiving information about printing transactions.

The arguments set forth above in regard to claim 2 are here reincorporated with respect to claim 11. Keane never mentions any unbilled alert, which is hardly surprising given that it is not a billing/accounting system, but an order fulfillment system. The cited section of col. 14, lines 14 – 35, discloses nothing more than a Billing Information Screen to allow the customer to input billing information is among those presented in a standard windows application. There is no disclosure of any kind in that section which refers in any manner whatsoever to situation where a job has been executed and not billed or billing information associated with it regardless of whether there is a charge to a

customer or not. It cannot be sustained that Keane discloses a feature about which its specification is totally silent.

Claims 12 – 14 depend indirectly on claim 9 are allowable therewith. The remarks made with respect to claim 9 are reincorporated here and applied to claims 12 - 14.

With respect to claim 15 the Examiner cited Keane as disclosing a manager's module for setting a maximum unbilled print job number.

The remarks made with respect to claims 6 and 7 are reincorporated and applied to claim 15. The Purchase Wizard of Keane has no disclosure relating to the setting a maximum number of jobs that can be performed before satisfaction of billing information is demanded from the client computer. The quota control of claim 15 is not disclosed in Keane.

With respect to claim 16, the Examiner cited Keane as disclosing a billing dialogue module for forcing the user to enter qualification data before proceeding when the number of records pertaining to a print-job submitted by the user exceeds the maximum unbilled print job number.

The remarks made with respect to claim 7 is reincorporated and applied to claim 16. Keane has no disclosure that forces billing information to be entered when a quota or maximum number of jobs to be performed as been exceeded. The combination of quota control and billing satisfaction of claim 16 is not disclosed in Keane.

With respect to claim 17 the Examiner cited Keane as disclosing a billing dialogue module for obscuring a screen associated with the client computer

when the number of records pertaining to a print job submitted by the user exceeds the maximum unbilled print job number.

The remarks made with respect to claim 8 is reincorporated and applied to claim 17. Keane has no disclosure that obscures a display screen of the user when a maximum number of jobs to be performed as been exceeded. The combination of screen display, quota control and billing satisfaction of claim 17 is not disclosed in Keane.

With respect to claim 18 the Examiner cites Keane as disclosing a method of tracking print jobs on a computer network comprising the steps of detecting a print job sent by a user from a client computer, writing a record comprising data pertaining to the print job to a message queue, creating an unbilled message alert if a record is detected in the message queue for the user.

The remarks made with respect to claims 1 and 9 as amended are reincorporated and applied to claim 18. Claim 18 includes the distinguishing step over Keane of automatically creating an alert message of unbilled cost data on the client computer as noted by the Examiner at paragraph 1 of the Office Action. The applicants respectfully disagree with the Examiner's characterization of Keane and assert that: Keane's Purchase Wizard is a hostage or quarantined method; and Keane is not a recoupment system, but is a fulfillment system.

With respect to claim 19, the Examiner cited **Keane** as disclosing the method of claim 18, wherein said creating an unbilled message alert comprises the step of displaying one of an icon and a message on a computer screen associated with the client computer.

The remarks of claims 2 and 11 as amended are reincorporated and applied to claim 19. Further, claim 19 indirectly depends on claim 18 and is allowable therewith.

With respect to claim 20 the Examiner cited Keane as disclosing the step of initiating a billing dialogue when the number of records in the message queue exceeds an unbilled print job value.

The remarks of claims 6 and 15 as amended are reincorporated and applied to claim 20. Keane fails to disclose a quota or maximum number of jobs that can be performed before a billing dialogue appears, but displays the billing dialogue with each order as it is submitted in the Purchase Wizard. Keane does not disclose the quota based system of claim 20.

Claims 21 – 23 depend on claim 20 is allowable therewith as a matter of law. The remarks of claim 20 as amended are reincorporated and applied to claims 21 - 23.

With respect to claim 24 the Examiner cited Keane as disclosing the step of setting a maximum unbilled print job value.

The remarks of claims 6 and 15 as amended are reincorporated and applied to claim 24. Keane's ability to charge additional fees or not for enhancements has no logical relationship to the idea of setting a maximum value on the number of jobs that can be performed before satisfaction of billing information is demanded from the client computer. The quota control of claim 24 is not disclosed in Keane.

With respect to claim 25 the Examiner cited Keane as disclosing the step

of forcing the user to enter qualification data before proceeding when the number of records pertaining to a print job submitted by the user exceeds the maximum unbilled print job number.

The remarks of claims 7 and 16 as amended are reincorporated and applied to claim 25. Keane has no disclosure that forces billing information to be entered when a quota or maximum number of jobs to be performed as been exceeded. The combination of quota control and billing satisfaction of claim 25 is not disclosed in Keane.

With respect to claim 26 the Examiner cited Keane as disclosing the step of forcing the user to enter qualification data before proceeding when the number of records pertaining to a print job submitted by the user exceeds the maximum unbilled print job number by obscuring the screen of the client computer when the number of records pertaining to a print job submitted by the user.

The remarks of claims 8 and 17 as amended are reincorporated and applied to claim 26. Keane has no disclosure that forces billing information to be entered when a quota or maximum number of jobs to be performed as been exceeded. The combination of quota control and billing satisfaction of claim 26 is not disclosed in Keane.

With respect to claim 27 the Examiner cited Keane as disclosing a print tracking system comprising means for detecting a print activity, means for billing print activity and a message queue that functionally separates the means for detecting print activity and the means for billing print activity.

The remarks of claims 1, 9 and 18 as amended are reincorporated and

applied to claim 27. Claim 27 has been amended to distinguish over Keane by including a means for automatically generating a message alert of unbilled cost data when cost recoupment data is required for a job activity which has been performed but not billed, as suggested by the Examiner at paragraph 1 of the Office Action. The applicants respectfully disagree with the characterization of Keane. Keane's Purchase Wizard is a hostage or quarantined method. The customer does not get to initiate and cause print jobs to be performed until he first enters billing information to his credit card or account. Keane is not a recoupment system, but is a fulfillment system.

Claims 28 – 30 directly or indirectly depend on claim 27 and are allowable therewith as a matter of law. Further, the remarks made with respect to claim 27 are reincorporated herein.

With respect to claim 31 the Examiner cited Keane as disclosing the means for activating said billing dialogue when said message queue contains information extracted from a number of print activities exceeds a maximum unbilled print job value.

The remarks made with respect to claims 7, 16 and 25 are reincorporated herein. Keane fails to disclose a cost tracking system which relates billing in any manner contingent on a quota value. The ability to charge additional fees or not for enhancements has no logical relationship to the idea of setting a maximum value on the number of jobs that can be performed before satisfaction of billing information is demanded from the client computer. The quota control of claim 31 is not disclosed in Keane.

With respect to claim 32, the Examiner cited Keane as disclosing a billing dialogue which prevents the user from continuing until billing information is entered.

The remarks made with respect to claims 8, 17 and 26 are reincorporated herein. Keane fails to disclose any means from preventing the user from interactively using the client computer to interactively access the tracking system any further until the billing information is provided.

Claims 33 and 34 depend indirectly on claim 27 and are allowable therewith as a matter of law. The remarks made with respect to claim 27 are reincorporated and applied to claims 33 and 34.

<u>lln</u> .5/15/006

Applicant respectfully requests advancement of the claims to allowance.

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